



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/614,104	07/08/2003	Shinichi Abe	KY-189	7651	
75	90 11/15/2005		EXAM	INER	
MATTINGLY, STANGER & MALUR, P.C.			FATAHI YAR, MAHMOUD		
Suite 370 1800 Diagonal Road			ART UNIT	PAPER NUMBER	
Alexandria, VA			2674		
			DATE MAILED: 11/15/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/614,104	ABE ET AL.					
Office Action Summary	Examiner	Art Unit		.			
	Mike Fatahiyar	2674		•			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence	address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of the D (35 U.S.C. § 133)	nis communi				
Status		•					
1) Responsive to communication(s) filed on 11 M	larch 2005.	•		•			
_	action is non-final.						
3) Since this application is in condition for allowar		secution as to	the meri	ts is			
closed in accordance with the practice under E							
. •	, , , , , , , , , , , , , , , , , , , ,	:					
Disposition of Claims	•	: :		•			
4) Claim(s) 1-14 is/are pending in the application.							
4a) Of the above claim(s) is/are withdraw	; ;	•	•				
5) Claim(s) is/are allowed.		•					
6)⊠ Claim(s) <u>1 and 14</u> is/are rejected.							
7) Claim(s) 2-13 is/are objected to.	;						
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Paners			,	•			
Application Papers							
9) The specification is objected to by the Examine	-						
10) \boxtimes The drawing(s) filed on <u>08 July 2003</u> is/are: a) \boxtimes accepted or b) \square objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form	PTO-15	2.			
Priority under 35 U.S.C. § 119		:		•			
·		· · · · · · · · · · · · · · · · · · ·					
12) Acknowledgment is made of a claim for foreign)-(a) or (t).		•				
a) ⊠ All b) □ Some * c) □ None of:	. :	.•					
1. Certified copies of the priority documents have been received.							
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 							
		ed in this ivation	nai Stage	?			
application from the International Bureau		٠.		•			
* See the attached detailed Office action for a list	or the certified copies not receive	ea.	•				
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/11/05, 9/11/0 and 7/8/03.	5) Notice of Informal P 6) Other:	atent Application (PTO-152)				

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al(cited JP publication number 05-218847) in view of Mikami et al(6,661,397B2).

Toshiyuki et al disclose a CMOS push-pull output stage drive circuitry for suppressing feed-through currents comprising a CMOS circuit having a first p-channel transistor(10) having a first time constant, a second n-channel transistor(12) having a second time constant and one of the time constants being selected(i.e., one of the transistors 10 or 12 being selected) such that, when said drive circuit receives a predetermined logic signal, one of said first and second transistor is turned ON after the other transistor is turned OFF(see the abstract). Toshiyuki et al substantially show all the features of the above claims except for the "driving of a display element in a display system". However, Mikami et al is cited to show that the concept of utilizing CMOS push-pull transistors(2, 3, 9, 43, 44, 46) circuitry for driving an electroluminescent display device(22) is old(see figures 1, 4-5 and 6-7). Thus, it would have been obvious

Art Unit: 2674

to one of ordinary skill in the art to modify the system of Toshiyuki et al with the noted teaching of Mikami et al such that to use the CMOS push-pull output stage drive circuitry for driving an display element in a display drive system because both references are related to CMOS push-pull output stage drive circuitry for suppressing feed-through currents.

- 3. Claims 2-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koyama, Utsunomiya et al, Akimoto et al and Yamazaki et al are made of record to show various types of CMOS push-pull output stage drive circuitry for driving a matrix display device.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Fatahiyar whose telephone number is (571)272-7688. The examiner can normally be reached on Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard, can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Fatahiyar

November 13, 2005

XIAO WU PRIMARY EXAMINER